

TRIPOL'SKIY, V. (g. Chuguyev, Khar'kovskoy oblasti)

Intermediate frequency amplifying adapters for the "Temp-2" and
"Avangard-55" television sets. Radio no.3:32-33 Mr '58. (MIRA 11:3)
(Television--Equipment and supplies)

TRIPPEL', A.I.

Paper chromatography of fat aldehydes. Izv.vys.ucheb.zav.; pishch.tekh.
no.5:155-157 '63. (MIRA 16:12)

1. Leningradskiy institut sovetskoy trgovli imeni F.Engel'sa,
kafedra tovarovedeniya prodovol'stvennykh tovarov.

Card
TRIPPEL', A. I.: Master Tech Sci (diss) -- "Investigation of the use of the method of distributive chromatography for qualitative analysis of edible fats of animal origin". Leningrad, 1958. 16 pp (Min Trade USSR, Leningrad Inst of Soviet Trade im F. Engel's), 100 copies (KL, No 6, 1959, 136)

TRIPPEL', A.I.

Chromatographic analysis of mixtures of fatty acids. Izv.vys.ucheb.
zav.pishch.tekh. no.4:156-162 '58. (MIRA 11:11)

1. Leningradskiy institut sovetskoy trgovli imeni F. Engel'sa,
Kafedra tovarovedeniya prodovol'stvennykh tovarov.
(Acids, Fatty—Analysis) (Paper chromatography)

TRIPSA, I.

"Experimental study of the viscosity of basic Martin slags. I. Laboratory research of the viscosity and conductivity of basic slags."

p. 289 (Studii Si Cercetari De Metalurgie) Vol. 2, no. 3, 1957
Bucharest, Rumania

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4,
April 1958

18(5) RUM/9-59-9-3/46
AUTHORS: Dragomir, Ioan, Tripşa, Iosif, and Nardin, Mario,
Engineers
TITLE: Research Work on Hydrogen Content Variation, in
Steel Made in 1.5 and 3 Ton Electric Furnace
PERIODICAL: Metalurgia şi construcţia de maşini, 1959, Nr 9,
pp 743-747 (RUM)
ABSTRACT: The authors point out that greater attention is paid
to the gas contents of steel which in most cases is
harmful to the mechanical properties of the product.
The determination of the gas contents of steel has
been a subject of study at the Polytechnical Insti-
tute of Bucharest, Department of Ferrous Metallurgy,
since 1955, when the first chemical determinations
of nitrogen in carbon steels were made. In 1958, a
method was established for the determination of the
hydrogen contents of steel by heating in vacuum.
This method was used by the authors of this paper.
The purpose of the article is to give an idea of the
variation of the H contents of electric furnace cast
Card 1/9 ✓

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Research Work on Hydrogen Content Variation, in Steel Made in 1.5
and 3 Ton Electric Furnace

steel. The research was done with the cooperation of a Rumanian machine-building plant. In that plant a high percentage of scrap was obtained through the growth of steel in the molds, and it was thought that the possible cause was a high gas content. At the same time, the research presented in this article constituted a verification of the apparatus for determining hydrogen in steel of the Department of Ferrous Metallurgy (Catedra de Siderurgie). The gases are present in steel in gaseous form (in the pores, as solid solutions, or as separate solid phases). They penetrate into the steel during its preparation, originating in the gaseous medium of the furnace or in the charge or admixture materials. The solubility of gases in metals is discussed and its function of temperature presented in Equation 1. The allotropic state of the metals also influences the gas solubility. For example, in alpha iron, the solubility of hydrogen jumps at 900°C to 4.7✓

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milliliter per 100 gram. In the moment of melting, the solubility of H jumps from 14 to 25 ml per 100 g of iron. The speed of dissolving gases in metals depends on many factors such as the state of aggregation, the state of the surface, the crystalline structure, the degree of agitation of the liquid, the pressure and temperature of the gas. In the solid state, the permeability of the metals for the gases is determined by the crystalline structure of the metals. For example, alpha iron is more permeable for H than gamma iron is. This is explained by the fact that the gaps uniting neighboring interstices are larger for volume-centered networks than for a network with centered surfaces. This circumstance is used in the vacuum extraction of H from solid steel: it is recommended doing this process under the $\alpha \rightarrow \gamma$ allotropic transformation point. The diffusion rate of a gas through a metal depends on the partial pressure as shown in Equation 2. Among

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Research Work on Hydrogen Content Variation, in Steel Made in 1.5
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the gases dissolved at steel making temperatures is hydrogen, too. During the cooling down and especially during solidification, the solubility of the gases sinks, the gases leave the solution either in gaseous form or as chemical combinations. Hydrogen escapes mostly in molecular form. Some of the gas escaping during cooling remains within the steel-forming cavities which finally can cause a rejection of the material or cast part. In certain cases, the gases dissolved in steel escape under the action of mechanical or thermal processing and lead to the formation of cracks, flakes in the steel. In certain temperature conditions, the hydrogen present in solid solution in steel reacts with oxides, forming water vapors insoluble in steel-forming fissures called "hydrogen wounds". Hydrogen in solid solution lowers the plasticity of steel and titanium, etc. This disadvantage can be eliminated by annealing. The gases also influence the electric, magnetic, and

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chemical properties of the alloys. For example, the hydrogen in transformer (electrical) steel sheets increases the energy losses in iron. The dissolved gases also lower the resistance of corrosion of the steel. There are several methods of determining the hydrogen contents of steel. The most adequate one is the method of extraction at high temperature in vacuum, the authors point out. The present research described was made to determine the hydrogen contents of steel, made in electric furnaces. The samples were taken from the liquid bath of the furnace. They were deoxidized with aluminum and poured into a special chill mold, as shown in Fig 1. That chill ensures an almost instantaneous solidification of the steel sample. Immediately after the filling of the chill the sample was hardened in water, and after 2 or 3 hours, the hydrogen contents were determined. If for some reasons the determination is not possible during that time, the samples have

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RUM/9-59-9-3/46

Research Work on Hydrogen Content Variation, in Steel Made in 1.5
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to be preserved in dry ice. All these measures were taken to prevent, as much as possible, the escaping of hydrogen from the steel. The short time was required, as it is known that hydrogen escapes even from steel at room temperature. Through heating in vacuum, the hydrogen diffuses to the outer part of the sample. The diffusion rate is expressed by Equation 3. The equation indicates that one of the main factors, influencing the diffusion process is the concentration gradient between the solid and the gaseous phase. Therefore, to extract as much hydrogen as possible from the steel, the partial pressure of the hydrogen must be lowered according to the residual hydrogen contents in the steel. Equation 4 shows the influence of the temperature on the diffusion process. The escaping of hydrogen passes through three stages: 1) Diffusion of H atoms from the depth of the sample to its surface; 2) Association of the atoms of H to molecules at

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Research Work on Hydrogen Content Variation, in Steel Made in 1.5
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increase ceased. Then it was removed to the end of the quartz tube by means of an electromagnet, and the operation was repeated with the second sample, and so on. The H contents were calculated according to Formula 5. The carbon steel was made in 1.5-tons and 3-tons electric furnaces. Three of the 20 charges were eliminated from the results, as those charges has no normal character, due to the shortages of electrical energy supply. The variation of the H contents is represented in the Figs 3, 4, and 6. The variation of the degassing in function of the decarbonizing rate is shown in Fig 5. The authors reached the following conclusions: The charge must be carefully selected. It must not contain too much oily chip. Boiling - preferably short and intense - is an efficient means of lowering the gas in steel. The decarbonization ore must not be too moist. The period of deoxidation must be as short as possible. After the forming of the slag it is

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Research Work on Hydrogen Content Variation, in Steel Made in 1.5
and 3 Ton Electric Furnace

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to 4 minutes to lower the partial pressure of the
water vapors in the furnace atmosphere. The ferro-
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Soviet references.

Card 9/9

TRIPSA, I., conf. univ.

A powerful siderurgical industry. St si Teh Buc 16
no. 5: 3-5, 26 May '64.

1. Director of the Institute of Metallurgic Research,
Bucharest.

TRIPSA, I.

RUMANIA

No degree given

No affiliation given

Bucharest, Studii si Cercetari de Metalurgie, No 3, 1962, pp 361-366.

"Production of Fined Manganese Iron from Poor and Phosphorous Ores
by means of Aluminothermics of Liquid Manganese Slag."

18(5)

AUTHORS:

Dragomir, Ioan, Tripşa, Iosif, and Nardin, Mario, RUM/9-59-9-3/46
Engineers

TITLE:

Research Work on Hydrogen Content Variation, in
Steel Made in 1.5 and 3 Ton Electric Furnace

PERIODICAL:

Metalurgia şi construcţia de maşini, 1959, Nr 9,
pp 743-747 (RUM)

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The authors point out that greater attention is paid to the gas contents of steel which in most cases is harmful to the mechanical properties of the product. The determination of the gas contents of steel has been a subject of study at the Polytechnical Institute of Bucharest, Department of Ferrous Metallurgy, since 1955, when the first chemical determinations of nitrogen in carbon steels were made. In 1958, a method was established for the determination of the hydrogen contents of steel by heating in vacuum. This method was used by the authors of this paper. The purpose of the article is to give an idea of the variation of the H contents of electric furnace cast

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Research Work on Hydrogen Content Variation, in Steel Made in 1.5
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RUM/9-59-9-3/46

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water vapors in the furnace atmosphere. The ferro-
alloys must be heated to red before being introduced
in the bath. There are 2 diagrams, 4 graphs, and 4
Soviet references.

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TRIPSA, L.: DRAGOMIR, L: NARDIN, M.

Study on the variation of hydrogen content in the steel processed in the 1.5 and 3-ton electric furnaces. p. 743

METALURGIA SI CONSTRUCTIA DE MASINI. (Ministerul Industriei Metalurgice si Constructiilor de Masini si Asociatia Stiintifica a Inginerilor si Technicienilor din Rominia) Bucuresti, Rumania.
Vol. 11, no. 9, Sept. 1959

Monthly List of East European Accessions (EEAI) LC Vol. 9, no. 2, Feb. 1950.

Uncl.

TRIPSA-Nedelnic, E.

RUMANIA/Human and Animal Physiology - Internal Secretion.

V-9

Abs Jour : Ref Zhur - Biol., No 1, 1958, 4174

Author : S. Milku, E. Tripsa-Nedelnic

Inst : Academy of the Rumanian Popular Republic

Title : Some Observations of Plethysmography in Diabetes
Insipidus

Orig Pub : Studii si cercetari endocrinol. Acad RPR, 1956, 7, No 1,
116

Abstract : Plethysmography was used for the study of vascular disorders and of the reactivity of the cerebral cortex in diabetes insipidus. Nine patients and 8 controls were studied. Determinations were made under fasting conditions, after a meal and after the administration of a posterior hypophysis extract. In spontaneous recording, a certain slowing-down of the sub-cortical

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RUMANIA/Human and Animal Physiology - Internal Secretion.

V-9

Abs Jour : Ref Zhur - Biol., No 1, 1958, 4174

area was noted. When the patients were thirsty, the degree of the excitability of the subcortical centers was proportional to the duration of the thirst and depended on the type of diabetes. Ingestion of food slows down the excitation of the cortical centers produced by thirst. Injections of posterior hypophysis extract eliminate the slowing-down of the subcortical centers.

Card 2/2

TRISANTOVICH, I.Ye., rentgenotekhnik

Letter to the editor. Vest.rent. 1 rad. 34 no.3:90 My-Je
'59. (MIRA 12:10)

1. Irbit'skaya gorod'skaya bol'nitsa Sverdlovskoy oblasti.
(X RAYS--EQUIPMENT AND SUPPLIES)

ZONNENBERG, S.M.; TRISANTOVICH, Ye.V.

~~_____~~
Dies for clamping bevel gears during hardening. Stan.i instr.
28 no.6:34-35 Je '57. (MLRA 10:8)
(Dies (Metalworking))
(Metals--Hardening)

TRISANTOVICH, Ye. V.

AUTHOR: ZONNENBERG, S.M., TRISANTOVICH, Ye. V. PA - 3625
TITLE: A Die for the Clamping of Bevel Gears when Hardening.
(Shtamp dlya zazhima konicheskikh zubchatykh kolez pri zakalke,
Russian).

PERIODICAL: Stanki i Instrument, 1957, Vol 28, Nr 6, pp 34 - 35 (U.S.S.R.)

ABSTRACT: In order to avoid warping the thermal treatment of particularly precise gears is carried out in special clamping dies on hardening presses. Hardening is carried out as follows: The heated gear is clamped in a die which is mounted on a pneumatic press, and in this position it is chilled in oil. The die and a pneumatic hardening press are shown by 3 illustrations and their finish and operation are described in detail.

ASSOCIATION: Not given
PRESENTED BY:
SUBMITTED:
AVAILABLE: Library of Congress

Card 1/1

~~TRIPSA~~, Iosif [Tripsa, J.], kand.tekhn.nauk, dots.

Steel of Hunedoara. Nauka i zhizn' 27 no.5:29 My '60.

(MIRA 13:6)

1. Bukharestskiy politekhnicheskoy institut, glavnyy redaktor
rumynskogo nauchno-populyarnogo zhurnala "Shtiinta shi tehnika"
("Nauka i tehnika").

(Hunedoara, Rumania--Steel)

EST AND INT COVER		PROCESSING AND		EST AND INT COVER	
BC				a-1	
<p>Rapid determination of antimony, F. J. Tammox (Ukrain. Ch. 1984, 9: 341-345). Ag, KI, NaOH, and BaCl_2 are added to the solution, which is shaken. Na_2S is added, and the filtrate is made acid with HCl; when it turns ppt. indicates the presence of H_2PO_4^- and H_2PO_3^- ions.</p>					
A 52-51 A METALLURGICAL LITERATURE CLASSIFICATION					
GROUPS		LETTERS		GROUPS	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100	A B C D E F G H I J K L M N O P Q R S T U V W X Y Z	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100	

BC

A-1

Detection of cadmium. F. I. Tinschur (J. Appl. Chem. Russ., 1935, 8, 1289-1270).—Ag, Pb, Hg, Bi, Fe, Al, Cr, Mn, and Sn are pptd. by adding dil. aq. KI, conc. aq. NH_3 , and 5-6 drops of H_2O_2 to 1 c.c. of solution, the solution is filtered, and excess of KCN and a few drops of aq. Na_2S are added to the filtrate (containing Zn, Co, Ni, Cu, and Cl), when a yellow ppt. is obtained in presence of ± 0.00056 mg. of Cd.

R. T.

ASM-ISA METALLURGICAL LITERATURE CLASSIFICATION

SECTION	SUBSECTION	DETAILS	REMARKS
1	1	1	1
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100	100	100	100

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***A New Method for the Detection of Cadmium.** F. I. Trishin (*Zhurnal Prikladnoi Khimii* (*J. Applied Chem.*), 1935, 8, (7), 1269-1270; *Ibid. Chem. Abstr.*, 1936, [A], 303).--[In Russian.] Ag, Pb, Hg, Bi, Fe, Al, Cr, Mn, and Sn

are precipitated by adding dilute aq. KI, concentrated aq. NH₃, and 5-6 drops of H₂O₂ to 1 c.c. of solution; the solution is filtered, and excess of KCN and a few drops of aq. Na₂S are added to the filtrate (containing Zn, Co, Ni, Cu, and Cd), when a yellow precipitate is obtained in presence of ≤ 0.00050 mg. of Cd. S. G.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

GUZVICH, I.V.; VORONIN, B.A.; KVLADIN, V.A.; POGORVSKIY, Ye.A.; TRISHCHINA,
H.P.; YUNGEL, V.G.

Thermodynamic functions of mono- and diatomic gases within a wide
range of temperatures. Part 6: O , O^+ , O_2 , and O_2^+ in the ideal state
up to 20 000° K. Trudy GIKH no.49:38-60 '62.

(MIRA 17:11)

TRISHECHKIN, N.

The month's drive for efficiency suggestions gave a new impetus to creative activity. Muk.-elev.prom. 23 no.2:30 P '57. (MLRA 10:5)

1. Grodnenskaya oblastnaya kontora khleboproduktov.
(Grodno Province--Grain trade)

TRISHECHKIN, N.

Efficiency experts of the Grodno Cereal Products Administration.
Muk.-elev.prom. 25 no.7:26 J1 '59. (MIRA 12:11)

1. Grodnenskoye upravleniye khleboproduktov.
(Grain milling)

TRISHECHKIN, N.

Eliminate shortcomings which prevent the increase of labor productivity
and the reduction of operation costs. Muk.-elev.prom.22 no.7:31 J1 '56.
(MIRA 9:9)

1.Grednenskaya oblastnaya kontera Zagetzerne.
(Grain elevators)

Trishevskiy, I. S.

ALEKSANDROV, P.A., kandidat tekhnicheskikh nauk; TRISHEVSKIY, I.S.,
inzhener.

Efficient method of gauging rails. Stal' 15 no.12:1112-1115
D '55. (MIRA 9:2)

1. Ukrainskiy nauchno-issledovatel'skiy institut metallov.
(Rolling (Metallwork)) (Railroads--Rails)

TRISHEVSKIY, I.S., inzhener

A universal adjustable feedbox. Vest.mash.35 no.8:51 Ag'55.
(Rolling mills) (MIRA 8:10)

137-58-1-638

TRISHEVSKIY, I. S.

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 1, p 100 (USSR)

AUTHOR: Trishevskiy, I. S.

TITLE: Streamlining the Roller Equipment of Rolling Mills (Ratsionalizatsiya valkovoy armatury prokatnykh stanov)

PERIODICAL: Tr. Nauchno-tekhnicheskogo obshchestva chernoy metallurgii, 1956, Vol 10, pp 428-445

ABSTRACT: The Ukrainian Metals Institute has carried out a study with the object of disseminating industrial experience and developing recommendations regarding designs and materials for fittings (F). The study was made at the Rail and Shape Mills of the KMK, MMK, the Azovstal' Works, the Stalino Iron and Steel Mill, the Krasnyy Oktyabr' Mill and others. It was found that the designs of rolling F and the mountings thereof reveal significant shortcomings in the majority of cases and are in part obsolete. Often F are designed incorrectly, without consideration of the specific conditions under which the parts thereof will function. As a result of the study performed, new guiding recommendations have been developed for the design, construction, and mounting of F parts; two albums of standard

Card 1/2

137-58-1-638

Streamlining the Roller Equipment of Rolling Mills

roller F, used in the rolling of 45 shapes, have been compiled. See RzhMet, 1957, Nr 12, 22805.

B. Ye.

1. Rolling mills—Study and teaching 2. Rolling mills—Design

Card 2/2

TRISHEVSKIY, Igor' Stefanovich

TRISHEVSKIY, Igor' Stefanovich; REZNIK, Ye.Ya., otvetstvennyy red.;
SINYAVSKAYA, Ye.K., red.izdatel'stva; ANDREYEV, S.P., tekhn.red.

[Rolling mill guides] Provodki prokatnykh stanov. Khar'kov,
Gos.nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi metallurgii,
1957. 283 p. (MIRA 11:1)

(Rolling mills--Equipment and supplies)

TRISHETSEY, I.S.

PANICH, B.I., kand. tekhn. nauk; TRISHETSEY, I.S., inzh.

Design parameters of molds used in casting large ingots. Bul.
TSNIICM no.15:6-18 '57. (MIRA 11:5)

(Molding (Founding))

TRISHEVSKIY, I.S.

"Equipment of rail, girder, and large section mills" by B.M.Shum.
Reviewed by I.S.Trishevskii. Stal' no. 7:638-640 J1 '58. (MIRA 11:7)

1. Ukrainskiy institut metallov.
(Rolling mills--Equipment and supplies)
(Shum, B.M.)

25(1)

PHASE I BOOK EXPLOITATION SOV/2494

Trishevskiy, Igor' Stefanovich, Boris Il'ich Panich, and Nikolay Antonovich Nikolayenko

Slitki i izlozhnitsy (Ingots and Ingot Molds) Kiyev, Gostekhizdat UkrSSR, 1959. 221 p. 2,200 copies printed,

Ed.: L. Raytburd; Tech. Ed.: K. Gusarov.

PURPOSE: This book is intended for engineers and technicians in the steelmaking, rolling, and founding industries, as well as for students of vuzes and tekhnikums.

COVERAGE: The authors discuss mold designs for casting heavy ingots in the production of rimmed- and killed-steel blooms and slabs. They make suggestions for calculating ingot and mold dimensions to assure minimum waste. Also discussed are mold failure and its prevention and modern methods of ingot-mold making. In the Appendix

diagrams of molds and hot tops used at larger Soviet steel plants are presented. No personalities are mentioned. There are 39 references: 25 Soviet, 3 German, and 11 English.

Card 1/4

Ingots (Cont.)

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AVAILABLE: Library of Congress

Card 4/4

GO/jb
11-6-59

TRISHEVSKIY, I.S., kand.tekhn.nauk

Roll grooving for the rolling of railroad rails. Trudy Ukr.
nauch.-issl.inst.met. no.5:158-175 '59. (MIRA 13:1)
(Rolls (Iron mills)) (Railroads--Rails)

TRISHEVSKIY, I.S.; ZHURAVYANOV, Ya.V.; KOLTOVA, G.I.

Corrugated cold-bent steel. Standartizatsiya 28 no. 2:55-60
J1 '64. (MIRA 1964)

TRISHEVSKIY, I.S.; SKOKOV, F.I.; PROKOPOVA, G.I.

Cold bent angles and channels. Standartizatsiya 28 no.8:56-57
Ag '64. (MIRA 17:11)

L 38999-66 E: (S)/ESP(K)/DWP(L)/BTI LSPAC, JI/17

ACC NR: AP6029554

SOURCE CODE: UR/0422/66/000/003/0093/0093

AUTHOR: Trishevskiy, I. S.; Prokopova, G. I.; Dzina, Yu. V. 44

ORG: Ukrainian Scientific Research Institute of Metals (Ukrainskiy nauchno-issledovatel'skiy institut metallov)

TITLE: Technical specifications for cold-bent steel 4

SOURCE: Standarty i kachestvo, no. 3, 1966, 93

TOPIC TAGS: low alloy steel, structural steel, carbon steel, metal property, solid mechanical property, scientific standard

ABSTRACT: State Standard (GOST) 11474-65 is for "Steel, Cold-Formed. Technical Specifications." The date for introducing it is January 1, 1967. The standard was developed by the Ukrainian Scientific Research Institute of Metals.

The standard encompasses cold-bent shapes of various forms, sizes and designations, made of common hot-rolled carbon steel, quality carbon, structural and low-alloy steel with a time-to-failure less than 60 kg-sec/mm².

The possibility is of making cold-bent shapes from steels of other grades with a time-to failure exceeding 60 kg-sec/mm² has been provided.

In cold-bent shapes the mechanical properties, if this a specification of the order, are determined according to the initial sheet billet;

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ACC NR: AP6029554

they should satisfy the norms of the corresponding standards (GOST-500-58, GOST 501-58, GOST 914-58, etc.) or special technical conditions. Tests of mechanical properties of the initial billet are conducted according to GOST 1497-61.

The finished product should be inspected by the manufacturer's quality control section.

The manufacturer should guarantee conformity of all products with specifications of the present standard.

The introduction of the standard into practice will eliminate present differences in technical conditions for the delivery of shapes.

[JPRS: 36,728]

SUB CODE: 11, 20 / SUBM DATE: none

Card 2/2 H.S

L 39676-66 EWT(m)/ENNA(d)/ENP(t)/ETI/ENP(k) LJP(c) ID/HW/CD-2

ACC NR: AR6009955

SOURCE CODE: UR/0137/65/000/012/DO08/DO08

AUTHORS: Vorontsov, N. M.; Trishevskiy, I. S.; Drapiko, P. Ye.

TITLE: Investigation of the mechanical properties of cold-worked profiles, manufactured from steels of type 1Kh18N9T, 08Kh13, and St.3

SOURCE: Ref. zh. Metallurgiya, Abs. 12D65

REF SOURCE: Sb. tr. Ukr. n.-i. in-t metallor, vyp. 11, 1965, 197-207

TOPIC TAGS: ^{solid mechanical property} steel, alloy steel, steel forging/ 1Kh18N9T steel, 08Kh13 steel, St.3 steel

ABSTRACT: The mechanical properties of profiled strips of 1Kh18N9T, 08Kh13, and St 3 steels were investigated. For profiled strips of 1Kh18N9T steel, the tensile strength increased from 67 to 89 kg/mm², the yield stress increased from 34 to 55 kg/mm², the surface hardness increased from 80 to 102 R_B, and the relative elongation decreased from 38 to 25%. For strips of 08Kh13 the tensile strength increased from 50 to 67 kg/mm², the yield stress increased from 37 to 63 kg/mm², the surface hardness increased from 82 to 97 R_B, and the relative elongation decreased from 20 to 6%.

Shapes fabricated from 1Kh18N9T have the maximum strength characteristics and the greatest relative elongation. The method developed for determining the cited values of the characteristics of the mechanical properties of shapes by comparing the

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UDC: 621.771.001

L 39676-66

ACC NR: AR6009955

specimens with standard specimens permits these values to be determined for a relatively small number of specimens with an error of 2--6%. 7 figures, 1 table.

L. Kochenova (Translation of abstract)

SUB CODE: 20, 11

Card 2/2

B.L.D.

SCIENTIFIC JOURNAL OF METALLOGRAPHY
AUTHOR: L. S. Kuznetsov, V. A. Naydenov, A. A. Shukov, M. L. Kalitov
TITLE: Formation of the corrugated
metal plate
1984 259-261
1984 259-261
The metal plate is formed by the rolling mill. The
starting material is a metal plate of the design
starting from the metal plate of the design. The thickness of the plate is 0.89 mm. The thickness of the plate depends on the thickness of the plate. The thickness of the plate increases with the thickness of the plate. The thickness of the plate is formed. Thinning of

CONT 1 / 2

1. The first step is to take a sheet of paper

and fold it in half. Then, take a piece of string and tie it around the middle of the paper. Next, take a piece of string and tie it around the middle of the paper. Then, take a piece of string and tie it around the middle of the paper. Finally, take a piece of string and tie it around the middle of the paper.

REF(b)/REF(1)/MA(1) RT-4 10/17/77
MISSION NR: AT501470K

UR/0000/66/000/000/0007/0020

"APPROVED FOR RELEASE: 04/03/2001

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CIA-RDP86-00513R001756620006-8"

TRISHEVSKIY, I.S.; KLEPANDA, V.V.; DAKHNOVSKIY, E.S.

Mastering the production of bent rolled shapes of the ribbed
plate type with grooving of the rolls and upsetting of the
build-up produced. Sbor. trud. UNIIM no.9:240-251 '64
(MIRA 18:1)

"APPROVED FOR RELEASE: 04/03/2001

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TRISHNIVSKIY, Igor' Stefenovich; KLEPANDA, Vladimir Viktorovich;
LITOVCHENKO, Nikitla Vasil'yevich

[Adjustment of continuous rolling mills] Nastroika nepre-
ryvnykh prokatnykh stanov. Moskva, Izd-vo "Metallurgiya,"
1964. 366 p. (MIRA 17:8)

AZARENKO, B.S., kand. tekhn. nauk; AFANAS'YEV, V.D., kand. tekhn. nauk;
 BROVMAN, M.Ya., inzh.; VAVILOV, M.P., inzh.; VERNIK, A.B., inzh.;
 GOLUBKOV, K.A.; GUBKIN, S.I., akademik [deceased]; GUREVICH, A.Ye.,
 inzh.; DAVYDOV, V.I., kand. tekhn. nauk; DROZD, V.G., inzh.;
 YERMOLAYEV, N.F., inzh.; ZHUKEVICH-STOSHA, Ye.A., inzh.; KIRILIN,
 N.M., kand. tekhn. nauk; KOVYNEV, M.V., inzh.; KOGOS, A.M., inzh.;
 KOROLEV, A.A., prof.; KUGAYENKO, M.Ye., inzh.; LASKIN, A.V., inzh.;
 LEVITANSKIY, B.A., inzh.; LUGOVSKIY, V.M., inzh.; MEYEROVICH, I.M.,
 kand. tekhn. nauk; OVCHAROV, M.S., inzh.; PASTERNAK, V.I., inzh.;
 PERLIN, I.L., doktor tekhn. nauk; POBEDIN, I.S., kand. tekhn. nauk;
 ROKOTYAN, Ye.S., doktor tekhn. nauk; SAF'YAN, M.M., kand. tekhn.
 nauk; SMIRNOV, V.V., kand. tekhn. nauk; SMIRNOV, V.S.; SOKOLOVSKIY,
 O.P., inzh.; SOLOV'YEV, O.P., inzh.; SIDORKEVICH, M.A., inzh.;
 TRET'YAKOV, Ye.M., inzh.; TRISHEVSKIY, I.S., kand. tekhn. nauk;
 KHENKIN, G.N., inzh.; TSELIKOV, A.I.; GOROBINCHENKO, V.M., red.
 izd-va; GOLUBCHIK, R.M., red. izd-va; RYMOV, V.A., red. izd-va;
 DOBUZHINSKAYA, L.V., tekhn. red.

[Rolling; a handbook] Prokatnoe proizvodstvo; spravochnik. Pod
 red. E.S.Rokotiana. Moskva, Metallurgizdat. Vol.1. 1962. 743 p.
 (MIRA 15:4)

1. Akademiya nauk BSSR (for Gubkin). 2. Chlen-korrespondent Akademii
 nauk SSSR (for Smirnov, Tselikov).
 (Rolling (Metalwor))--Handbooks, manuals, etc.)

TRISHEVSKIY, I.S., kand.tekhn.nauk; DZINA, Yu.V., inzh.; DONETS, G.V., inzh.

Bent profiles for metal structural elements. Prom. stroi. 39
no.11:30-33 '61. (MIRA 14:12)

1. Ukrainskiy nauchno-issledovatel'skiy institut metallov.
(Building materials)

TRISHEVSKIY, I.S., kand.tekhn.nauk; MIROSHNICHENKO, V.I., inzh.

Bent shapes for the mining industry. Gor.zhur. no.4:54-55 Ap
'62, (MIRA 154)

1. Ukrainskiy nauchno-issledovatel'skiy institut metallov.
(Rolling (Metalwork))

TRISHEVSKIY, I.S., kand.tekhn.nauk (Khar'kov); MIROSHNICHENKO, V.I., inzh.
(Khar'kov); POROSHIN, B.V., inzh. (Khar'kov)

Use of bent sections in machinery building for transportation.
Zhel.dor.transp.44 no.3:41-42 Mr '62. (MIRA 15:3)
(Railroads--Cars--Design and construction)

FRISHEVSKIY, I. S.

32

PHASE I BOOK EXPLOITATION

331/5985

Rokotyan, Ye. S., Doctor of Technical Sciences, ed.

Prokatnoye proizvodstvo; spravochnik (Rolling Industry; Handbook) v. 1. Moscow, Metallurgizdat, 1962. 743 p. Errata slip inserted. 9250 copies printed.

Authors of this volume: B. S. Azarenko, Candidate of Technical Sciences; V. D. Afanas'yev, Candidate of Technical Sciences; M. Ya. Brovman, Engineer; M. P. Vavilov, Engineer; A. B. Vernik, Engineer; K. A. Golubkov, Engineer; S. I. Gubkin, Academician, Academy of Sciences BSSR; A. Ye. Gurevich, Engineer; V. I. Davydov, Candidate of Technical Sciences; V. G. Drozd, Engineer; N. P. Yermolayev, Engineer; Ye. A. Zhukovich-Stopha, Engineer; N. M. Kirilin, Candidate of Technical Sciences; M. V. Kovynov, Engineer; A. M. Kogos, Engineer; A. A. Korolev, Professor; M. Ye. Kugayenko, Engineer; A. V. Laskin, Engineer; B. A. Lovitanskiy, Engineer; V. M. Lugovskoy, Engineer; I. M. Mayorovich, Candidate of Technical Sciences; M. S. Ovcharov, Engineer; V. I. Pasternak, Engineer; I. L. Perlin, Doctor of Technical Sciences; I. S. Pobedin, Candidate of Technical Sciences; Ye. S. Rokotyan, Doctor of Technical Sciences; M. M. Saf'yan, Candidate of Technical Sciences; V. V. Smirnov, Candidate of Technical Sciences; V. S. Smirnov, Corresponding Member, Academy of Sciences USSR; O. P. Sokolovskiy,

Card 1/2

Rolling Industry; Handbook

32
204/5725

Engineer; O. P. Solov'yev, Engineer; M. A. Sidorkovich, Engineer; Ye. M. Trst'yakov, Engineer; I. S. Trishovskiy, Candidate of Technical Sciences; G. N. Khonkin, Engineer; and A. I. Tsolikov, Corresponding Member, Academy of Sciences USSR. Introduction: A. I. Tsolikov, Corresponding Member, Academy of Sciences USSR; Ye. S. Rokotyan, Doctor of Technical Sciences; and L. S. Al'shevskiy, Candidate of Technical Sciences.

Eds. of Publishing House: V. M. Gorobinchenko, R. M. Golubchik, and V. A. Rymov;
Tech. Ed.: L. V. Dobuzhinskaya.

PURPOSE: This handbook is intended for technical personnel of metallurgical and machine-building plants, scientific research institutes, and planning and design organizations. It may also be useful to students at schools of higher education.

COVERAGE: The fundamentals of plastic deformation of metals are discussed along with the theory of rolling and drawing. Methods of determining the power consumption and the forces in rolling with plane surface or grooved rolls are .

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Rolling Industry; Handbook

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(A. I. Tselikov, V. V. Smirnov; revised by Ye. S. Rokotyan)

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Ch. 13. Auxiliary Machines and Mechanisms of Rolling Mills (A. I. Tselikov, V. V. Smirnov; revised by Ye. S. Rokotyan).

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Card 10/19

TRISHEVSKIY, I.S., kand.tekhn.nauk; SKOKOV, F.I., inzh.

Selecting dimensions of cold bent sections. Vest.mash. 42
no.4:52-54 Ap '62. (MIRA 15:4)
(Steel, Structural)

TRISHEVSKIY, I.S., kand.tekhn.nauk; SOROKO, L.N., inzh.; KLEPANDA,
V.V., inzh.; NAYDENOV, A.A., inzh.; SKOKOV, F.I.;
GAMERSHTEYN, V.A.; KALUZESKIY, V.B.

Roll grooving for the shaping of ribbed plates. Stal' 21 no.9:
817-824 S '61. (MIRA 14:9)

1. Ukrainskiy nauchno-issledovatel'skiy institut metallov i
zavod "Zaporozhstal'".
(Rolls (Iron mills))

TRISHEVSKIY, I.S., kand.tekhn.nauk; KURITSKIY, M.A., inzh.; BAT', Yu.I.,
inzh.; SKOKOV, F.I., inzh.; PODOL'SKIY, I.TS., inzh.

Pilot plant shape bending mill at the Ukrainian Institute of Metals.
Trudy Ukr. nauch.-issl. inst. met. no.7:178-195 '61. (MIRA 14:11)
(Ukraine--Rolling mills)

TRISHEVSKIY, I.S.; SOROKO, L.N.; NAYDENOV, A.A.

Production of cold-bent economical shapes. Metallurg 6 no.6:20-23
Je '61. (MIRA 14:5)

1. Ukrainskiy institut metallov i zavod "Zaporozhstal".
(Sheet-metal work)

27930

S/133/61/000/009/004/011
A054/A127

1.1300

AUTHORS: Trishevskiy, I. S., Candidate of Technical Sciences, Soroko, L. N.,
Klepanda, V. V., Naydenov, A. A., Skokov, F. I., Gamershteyn, V. A.,
Kaluzhskiy, V. B., Engineers

TITLE: Grooving of rolls for the shaping of corrugated sheets

PERIODICAL: Stal', no. 9, 1961, 817 - 824

TEXT: According to the authors the best way of producing corrugated sheets is rolling them from sheet metal on shaping mills instead of producing them by stamping. The groove designs of the rolls for this process were made to suit the pilot industrial-scale shaping mill of the Ukrainskiy institut metallov (Ukrainian Institute of Metals). The tests were carried out with 08K η (08kp) steel on 15 stands (scale 1:1). To ensure strip stability and a good quality corrugation, the design provides for the successive profiling of sectors, starting from the central rib towards strip edges. The ribs are shaped by the work rolls; before the first and second stand vertical auxiliary rolls are used as guides. One of the features of the new grooving system is the application of varying radii with a constant distance between the bending arc centers. The shaping radii are determined in such

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27930 S/133/61/000/009/004/011

A054/A127

Grooving of rolls for the shaping of corrugated sheets

a way that the length of the corrugations of the upper and lower roundings remains constant, whereas the dimensions of the transient shapes of the profile are determined in such a way that the perimeter of the ribs being formed remains constant in all passes. To support the peripheral sectors of the strip being shaped and to enable the metal to be displaced freely to the bending spot backing disks are used whose distance from the roll axis depends on the shape corrugation of the corresponding profile sections. This made it possible not to overlap the whole profile by the rolls to shorten the roll barrel. The rolls are assembled from horizontal parts on both ends. They are easily mounted and the gaps between the rolls can be adjusted accurately. When rolling corrugated sheets with this type of grooved rolls the height of the section deviated from the standard value (32 mm) by 0.6 - 1.0 mm, the corrugations varied between 1.7 - 2.5 mm in length and between 2.25 and 2.8 mm in width; the angle of inclination of the lateral external edges of the outer ribs varied between 69 - 70° instead of the required 72°30'. Moreover the sheet thickness was not uniform over its entire length and width; the sheet thickness at the bending spots is smaller at the front edge of the sheet than at the rear end. The relative thinning at the front end of the strip is 4.6% greater than at the rear. Based on the test results, the first batch of corrugated sheets was rolled on an 18 stand mill - (-4) x (400-1,500) -

Card 2/3

27930

S/133/61/000/009/004/011
A054/A127

Grooving of rolls for the shaping of corrugated sheets

of the "Zaporozhstal'" Plant under the following conditions: I - feeding stand with cylindrical rolls; II-VII - stands: shaping the central rib with bending angles of 12° - 28° - 46° - 62° - $72^{\circ}30'$ - $72^{\circ}30'$; VIII-XI - stands: shaping the internal lateral edges of the small outer ribs with bending angles of 18° - 40° - 60° - $72^{\circ}30'$; XII-XV - stands: shaping the lateral edges of the small outer ribs with bending angles of 18° - 40° - 60° - 73° ; XVI-XVII - stands: shaping the longitudinal nick with bending angles of 35° - 71° ; XVIII - stand: doubling stand XVII. The authors conclude by stating that the grooving of shaping mill rolls for the production of corrugated sheets, based on a constant distance between the bending arc centers and on a variable magnitude of radii makes it possible to obtain shapes without cracks in the bending spots and without surface defects. There are 4 figures.

ASSOCIATION: Ukrainskiy nauchno-issledovatel'skiy institut metallov (Ukrainian Scientific Research Institute of Metals) and "Zaporozhstal'" Plant

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Card 3/3

TRISHEVSKIY, I.S., kand.tekhn.nauk

Use of bent sections in the manufacture of machinery. Mashinostroitel'
no.12:8-10 D '60. (MIRA 13:12)

(Steel, Structural)

S/130/61/000/006/003/004
A006/A101

AUTHORS: Trishevskiy, I. S., Soroko, L. N., Naydenov, A. A.

TITLE: The production of cold-bent economical sections

PERIODICAL: Metallurg. no. 6, 1961, 20 - 23

TEXT: Information is given on experiences gathered in the manufacture of shaped sections at the "Zaporozhstal'" Plant. Two fully mechanized profile-bending units are now operating at the Plant, consisting of a set of machines for the preparation of blanks, shaping of bent sections, transportation and packing of finished products. The blanks are supplied in rolls to a defolder, straightened and cut with flying shears to gauged length. They are shaped between the rolls of the profile-bending machines, greased and packed. The sections are shaped by cold deformation in roll grooves, by gradual bending. The bent sections are produced from etched and non-etched hot and cold rolled strips with trimmed edges of the following steel grades: Cr (St.) 0, 3, 08, 10, 15, 20, 25, 30, (rimming and killed steels) 09Г2 (09G2) 10Г2 (10G2) 14ХГС (14KhGS) 15Х (15Kh) 20ХГС (20KhGS) НЛ -1 (NL-1) and НЛ -2 (NL-2). One of the profile bending machines is intended for the manufacture of diverse shaped sections from 2 - 8 mm thick and 80 - 500

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mm wide blanks, at a maximum height of the sections up to 160 mm. The strips to be shaped may be 3 to 12 m long. The machine is composed of 14 stands with common drive from two 480 kw motors; the shaping rate is up to 2.5 m/sec. The other machine is intended for the shaping of larger sections from ribbed plates, corrugated sheets, lining plates, large size squares, C- and trough-shaped profiles. They are produced from 1 - 6 mm thick low-carbon steels at a width of the initial blank from 400 to 1,500 mm; from 1 - 5 mm thick steels at 400 - 1,100 mm blank width and 50 kg/mm² ultimate strength; and from 1 - 5 mm thick steels at 400 - 900 mm blank width and 60 kg/mm² ultimate strength. The maximum height of shaped sections may be 200 mm at a length of strips to be shaped from 3 to 11 m. The machine consists of 20 stands driven by two 300 kw motors; the shaping rate is 3 m/sec. When introducing the production of shaped sections at Zaporozhstal', a series of deficiencies were revealed in the planning of shops, the design and performance of equipment and the technology projected. So the problem of manufacturing shaped disks for working rolls is not solved due to the lack of a roll-lathe department and shops for heat treating and hardfacing the disks. Larger storage space is needed for finished products. The set-up of flying shears is unsatisfactory. Cutting of rolls to gauged length is deficient. The vertical rolls used to maintain the strips between the stands of the machine do not prevent displacement of

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the strips, so entailing deviations from prescribed dimensions. Special guide fixtures have now been designed (Figure 1) to prevent side displacement of the strips during shaping process. A difference in the width of section shelves will be eliminated by the use of new guide fixtures, which soon will become operative. Production by the piece of shaped sections is less efficient and qualified than continuous production. However, the latter method can presently not be employed on the described profile-bending machines due to the lack of devices which cut the finished sections in the line at a rate of 3 m/sec. In manufacturing by the piece, best results will be obtained by using small angles of bending the section components during the initial passes, which will then be increased and decrease again during the subsequent passes. Composite working rolls are employed at the Plant consisting of a shaft, bearing disks whose surfaces form the grooves (Figure 2). This design will make it possible to develop grooves for the manufacture of several groups of sections with one set of rolls. This is achieved by placing backing rings in the joints of disks of the upper and lower rolls. The use of multi-purpose groove systems is however, only possible at an equal transition radius of section dimensions of the same group. Presently, 17 types of sections are being manufactured at Zaporozhstal'. There are 3 figures.

ASSOCIATION: Ukrainskiy institut metallov (Ukrainian Institute of Metals) zavod "Zaporozhstal'" (Zaporozhstal' Plant).

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Figure 1: Guide fixture for strips of angle iron

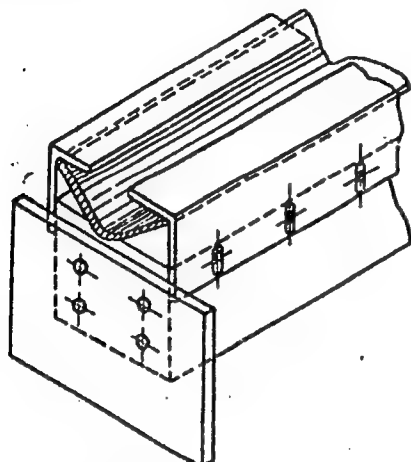


Рис. 1. Направляющая проводка для полос угольника

Figure 2:

A system of composite rolls for the shaping of U-sections



Рис. 2. Схема разборных валков для профилирования U-образного профиля

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VORONTSOV, N.M.; TRISHEVSKIY, I.S.; DRAPKO, P.Ye.

Investigating the mechanical properties of cold-bent shapes
made of 1Kh18N9T, 08Kh13 and St.3 steels. Sbor.trud. UNIM
no.11:197-207 '65. (MIRA 18:11)

SANDLER, N.I.; TRISHEVSKIY, I.S.; YUSHANOVA, L.F.

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Aid for ship model clubs. Voen. znan. 38 no.6:29 Je '62.
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1. Inzh.-inspektor TSentral'nogo komiteta Dobrovol'nogo
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(Ship models)

TRISHIN, A.

Results achieved by ship model builders. Voen.znan. 36 no.10:28-29
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Training judges for ship model contests. Voen.znan. 36 no.6:32
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Mastery of ship modlemakers. Voenn. znan. 38 no. 12:34 D '62.

(MIRA 15:12)

(Ship models—Competitions)

TRISHIN, A.

Change in the classification of ship models. Voenn. znaniya.
39 no.2:33 F '63. (MIRA 16:3)

1. Inzhener-inspektor Tsentral'nogo komiteta Dobrovol'nogo
obshchestva sodeystviya armii, aviatsii i flotu SSSR.
(Ship models)

TRISHIN, A. F.

Subject : USSR/Aeronautics - training AID P - 5448
Card 1/1 Pub. 135 - 25/31
Author : Trishin, A. F., Captain, mil. pilot class II
Title : Is the graph "P and D" necessary?
Periodical : Vest. vozd. flota, 1, 80-81, Ja 1957
Abstract : The author expresses the opinion that the graph "P and D", suggested by I. D. Papchenko, for the checking of the results of aerial firing is of little use and instead of that a decoding register should be used.
Institution : None
Submitted : No date

TRISHIN, A. K.

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Statbye ts. A. Bakhshiyev, S. G. Simonyan "Evropeyskaya tipograficheskaya
ustanovka. Etu - 300" (zhurn. "Soyuznyy. Spetsialnyy" 1949 No 1, anergiyet. Spetsialnyy,
1949, No 8, S. 25 - 26

So: Letopis No. 34

COMMON ELEMENTS																										COMMON VARIABLE INDEX																									
1ST AND 2ND ENDERS																										100 AND 6TH ENDERS																									
PROCESSES AND PROPERTIES INDEX																																																			
<p>F</p> <p>1183. SELECTION OF NOZZLES. Trishin, A. M. (Energeticheski Bull. (Pwr Bull.), 1947, (9), 21-24). Fuel consumption is considerably affected by the type, efficiency and number of steam nozzles. The author gives several rules dealing with spraying and more efficient selection of nozzle types and measurements.</p> <p>M</p>																																																			
<p>AGN-55A METALLURGICAL LITERATURE CLASSIFICATION</p>																																																			
<p>1ST AND 2ND ENDERS</p>																																																			
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<p>129. GAS BURNERS FOR COMBUSTION OF NATURAL GAS. Schneider, R. I. and Trishin, A. M. (Energeticheskii Byulleten (Pwr Bull.), Nov. 1947, (11), 17-20). Describes the burners used at the Saratovsk cracking plant, which permitted running the boilers at a much lower gas pressure, resulting in greater safety, minimum losses and greatly simplified burner installation.</p>			
<p>ASB SLA METALLURGICAL LITERATURE CLASSIFICATION</p>			
<p>1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100.</p>		<p>1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100.</p>	